CS-HH

HDMI Enhancer

Operation Manual

CS-HH

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Safety Precautions

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

Revision History

Version No	*Date*	*Summary of Change*
VR0	*20110610*	*Preliminary Release*
VR1	*20111012*	*Add Power Main in Sec.8*

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1. Introduction

This mini HDMI to HDMI enhancer can transmit digital audio and video signal and extending or cascade it without signal loss. It is capable of receiving and transmitting 2.25 Gbps bandwidth rate and the video resolutions supports up to 1080p@60Hz. The other important feature is that the system has built-in the equalizer and CDR (Clock Data Recovery) can provide long cable support even at deep color resolutions. Last but not least, the device does not require power adaptor as it gets power from the input source equipment.

2. Applications

- Installation usage
- HDMI signal cascading

3. Package Contents

- HDMI Enhancer
- Operation Manual

4. System Requirements

HDMI equipped source device and an HDMI equipped display (TV or monitor) or cascade with another HDMI device to extend the distance.

5. Features

- Built-in TMDS equalization and CDR (Clock Rate Recovery) for extended HDMI cable distance
- HDTV resolutions support 480i to 1080p@24/50/60 Hz, PC resolutions support VGA to UXGA
- Capable of receiving and transmitting 2.25 Gbps
- Requires HDMI source devices to output power to the unit over HDMI cable
- HDMI cable distance support 15 meters at either side of the unit

6. Specifications

Frequency bandwidth	2.25Gbps (single link)
Input Port	1 x HDMI (Female type)
Output port	1 x HDMI (Female type)
Output Resolution	HDTV: 480i ~1080p@24/50/60 PC: VGA~UXGA
Input Cable Distance	15M / 8 or 12 bits
Output Cable Distance	15M / 8 or 12 bits
ESD Protection	Human Body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Dimensions	65 mm (W) x 24 mm (D) x 10 mm (H)
Weight	30g
Chassis Material	Plastic
Silkscreen Color	Black
Operating Temperature	0˚C~40˚C / 32˚F ~ 104˚F
Storage temperature	-20˚C~60˚C / -4˚F ~ 140˚F
Relative Humidity	20~90% RH (no condensation)
Power Consumption	2W (Max)

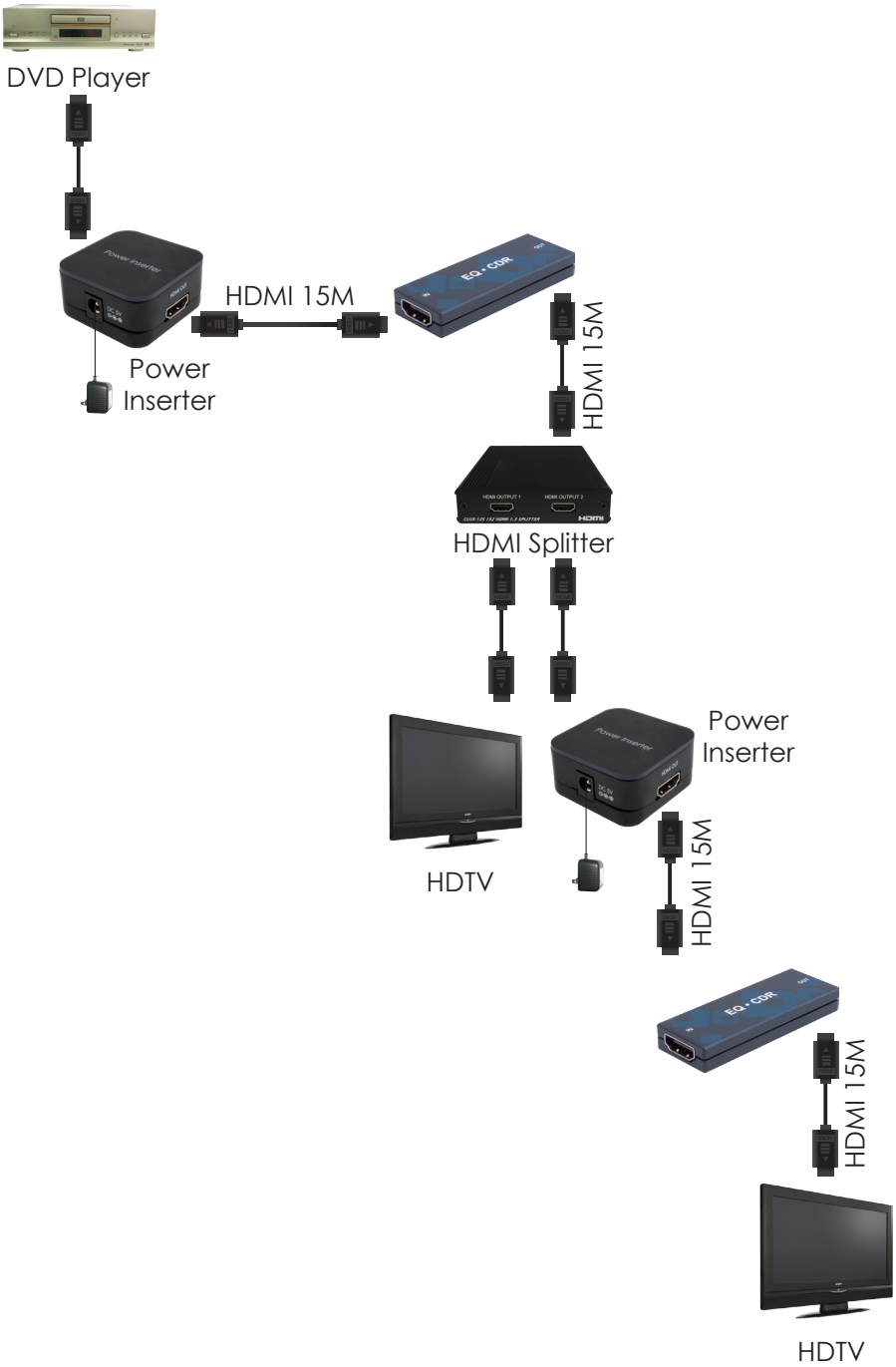
7. Operation Controls and Functions

The following sections describe the hardware components of the unit.

①. HDMI input: Connect the HDMI input port to the HDMI output port of your source equipment such as DVD/HDMI switcher/HDMI Splitter/HDMI Matrix. Direct power supply from HDMI input source equipment yet if the source can't supply with power users can connect an external power for external HDMI power supply.

②. HDMI output: Connect the HDMI output port to the HDMI input port of your HDMI transmitter box or display to enhance the source.

8. Connection and Installation



Acronyms

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Acronym	Complete Term
CDR	Clock Rate Recovery
HDMI	High Definition Multimedia Interface
TMDS	Transition-minimized Differential Signaling